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WASHINGTON, DC 20007

EXAMINER
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KETEMA, BENYAM

ART UNIT	PAPER NUMBER
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2629

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,483	<b>Applicant(s)</b> EICH ET AL.	
	<b>Examiner</b> BENYAM KETEMA	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10,12,14-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10,12,14-24 and 26-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 05/16/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 19, 2010 has been entered.

### ***Response to Amendment***

2. Claims 5, 11, 13 and 25 have been cancelled and claims 1, 2, 10, 17 and 26 have been amended. Currently claims 1-4, 6-10, 12, 14- 24 and 26- 28 are pending.

3. Applicant's arguments with respect to claims 1 and 11 have been considered but are not persuasive.

On page 8 and 9 of the Remarks, the Applicant argues that Strasser and Wells fails to teach the claimed feature of "...*user interface for receiving inputs from a user*" comprising, in combination with other elements, "*a rotary switch formed from the flexible sheet of the interface and configured for twisting relative to the at least one of a system of lights and the electronic display, wherein the*

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*rotary switch is configured to be twisted and to create one or more buckle points in the flexible sheet of the interface when twisted, the buckle points detectable by the touch sensitive surface...*” Examiner must respectfully disagree. First, Strasser (fig 2- 6 and Paragraph 17) discloses user operable input device (i.e. *user interface for receiving inputs from a user*), further more (Paragraph 15- 18) discloses that the input section could be a rotary switch. The prior art of record Strasser discloses that the input that is used by the user could also be a rotary switch as it is disclosed in (par. 17) however figure 2 only shows a push-button configuration wherein a skilled person can replace the push button with a rotary button, since the use of rotary button is already taught by Strasser. Second in regards to flexible sheet Walls (Fig 2B- 2E and page 11 line 3- 19) discloses that the buttons are made out of flexible material. Therefore the fact that Strasser discloses an input push button that can be substituted for rotary button and Walls discloses push button that is made out of flexible material, it would be in the scope/realm of Strasser and Walls discloses for a skilled person in the art to combine the two references’ so that the input device of Strasser would have flexible rotary button same as applicant’s claimed rotary button. Therefore one can see that Strasser in combination with Walls would disclose applicant’s recited limitation.

On page 10 and 11 of the Remarks, the Applicant argues that Obradovich fails to teach the claimed feature of “...*a rotary switch...*” Examiner must respectfully disagree. Examiner would like to point out that prior art of record Obradovich was brought in to remedy the limitation of the device (i.e. user

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interface) being mounted in a vehicle not to show or disclose the use of rotary switch. Further more since Strasser's device is a portable device (par. 3) it would be obvious to mount it in a vehicle as it is disclosed by Obradovich

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-4, 7, 10, 12, 14, 15, 21-24 and 26- 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strasser et al. (US PG Pub No 2003/0128191) in view of Walls (WO 03/088164).

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**As in Claim 1**, Strasser et al. discloses *a user interface for receiving inputs from a user (Paragraph 1), the user interface comprising:*

- *a touch sensitive surface having a plurality of regions, (Paragraph 14 and Fig 1 item 12 and 26) discloses a plurality of user operable element 26 is overlying portion of display 12.*
- *each region corresponding to a selectable function; (Paragraph 26 Fig 1 item 24) discloses operable element 26 may be automatically changed to match a change in the function of the operable element 26.*
- *Wherein the touch sensitive surface is at least partially transparent (Paragraph 15 line 1-4 Fig 1 item 18) discloses operable element 26 may comprise at least one transparent region 18.*
- *wherein at least one of a system of lights and an electronic display are disposed under the touch sensitive surface (Fig 5 item 30 and 12) discloses the light 30 and display 12 are disposed under the touch surface 26.*
- *controlled by electronics configured to selectively provide light to each of the regions. (Paragraph 22 and Fig 3 item 30)*
- *a rotary switch [(Paragraph 17) discloses rotary switches can be used], and configured for twisting relative to the at least one of a system of light and the electronic display, wherein the rotary switch (Paragraph 17) is configured to be twisted and to create one or more buckle points in the flexible sheet of the interface when twisted, the buckle point detectable by the touch sensitive surface. (Paragraph 17, 32- 34) discloses rotary*

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switches can be used and further more it is inherent to a rotary switch to twist. Strasser et al. and Walls are silent regarding buckle points.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify teachings of Strasser et al. so to have the rotary switch twist to a maximum point such that a buckle point is formed, which causes resistance/restriction from any further movement of the rotary switch, in order to indicate to the user that the maximum rotation point has been reached.

- Strasser et al fails to disclose *an interface formed from a continuous flexible sheet of at least partially transparent material and disposed on the touch sensitive surface over the plurality of regions, and the interface configured to provide tactile feedback to the user by flexibly deforming when pressed by the user*. Further more Strasser also failed to disclose the switch being formed from flexible sheet.
- However Wells discloses *an interface formed from a continuous flexible sheet of at least partially transparent material and disposed on the touch sensitive surface over the plurality of regions*, (Fig 2B-2E and page 11 line 19- page 12 line 6) discloses that the tactile feedback (i.e. interface) is pliable (i.e. flexible) and made out of silicon membrane as well as it is transparent. Therefore one can see that the input (i.e. switch) is made out of flexible material.
- *the interface configured to provide tactile feedback to the user by flexibly deforming when pressed by the user*; (Fig 2B-2E and page 11 line 3- 19)

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discloses that the interface is made out of flexibly material and deforms when it is used (pressed) by the user.

Strasser et al and Walls are analogues art because they are from the common area of user operable input devices. Strasser discloses user interface disposed on top of touch sensitive surface having plurality of regions. Further more each said regions corresponding to a different (selectable) functions. But fails to disclose said interface being formed out of continuous flexible transparent material and having the ability to deform when depressed by the user, however Wells discloses that the interface is made out of flexible and transparent material (silicon membrane). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Strasser's user interface to include (or be made out of) flexible transparent material (i.e. silicon) as an alternate design choose and further more to increases the comfort of users fingers by having a flexible buttons than a ridged one.

**As in Claim 2**, Strasser et al. discloses *a user interface according to claim 1, but fails to disclose portion of the interface is flexed upward and away from the touch sensitive surface over each region to simulate a mechanical button over each region*. However Wells (Fig 2B-2E and page 11 line 3- 19) discloses that the buttons flex upward away from touch sensitive (input detection) surface so that it can mimic mechanical button.



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**As in Claim 3**, Wells discloses *a user interface according to claim 2, but fails to disclose the function corresponding to one or more of the plurality of regions is configured to be changed by changing the light provided to each of the regions.* However, Strasser et al. (Paragraph 25) *disclose the function corresponding to one or more of the plurality of regions is configured to be changed by changing the light provided to each of the regions*

**As in Claim 4**, Strasser et al. discloses *a user interface according to claim 1, wherein the interface is configured to make localized contact with the region of the touch sensitive surface when pressed by the user.* (Fig 2-5 and Paragraph 28) discloses a localized contacts.

**As in Claim 7**, Strasser et al. discloses *a user interface according to claim 1, wherein the touch sensitive surface includes a display for at least one of graphics and text, and the at least one graphics and text are visible through the interface.* (Paragraph 25 line 4-8) discloses graphics or/and text could be displayed under the interface (operable element 26).

**As in Claim 10**, Strasser et al. discloses *a user interface for a vehicle, the user interface comprising:*

- *a plurality of switches, each switch corresponding to a function;*

(Paragraph 26 Fig 1 item 24) discloses operable element 26 may be

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automatically changed to match a change in the function of the operable element 26.

- *a display disposed beneath the interface*, (Paragraph 28 Fig 5 item 12 and 40) discloses display 12 is disposed under touch screen (interface).
- *the display configured to provide display signals corresponding to the function of each switch*; (Paragraph 26 Fig 1 item 24) discloses operable element 26 may be automatically changed to match a change in the function of the operable element 26.
- *Wherein the display is configured to selectively provide light beneath each of the plurality of simulated buttons*. (Paragraph 22 and Fig 3 item 30)
- *a rotary switch* [(Paragraph 17) discloses rotary switches can be used], and configured for twisting relative to the display, *wherein the rotary switch* (Paragraph 17) *is configured to be twisted and to create one or more buckle points in the flexible sheet of the interface when twisted, the buckle point detectable by the plurality of switches*. (Paragraph 17, 32-34) discloses rotary switches can be used and further more it is inherent to a rotary switch to twist. Strasser et al. and Walls are silent regarding buckle points. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify teachings of Strasser et al. so to have the rotary switch twist to a maximum point such that a buckle point is formed, which causes resistance/restriction from any further movement of the rotary switch, in order to indicate to the user that the maximum rotation point has been reached.

- Strasser et al fails to disclose *an interface formed from a continuous flexible sheet of at least partially transparent material and disposed over and spaced away from the plurality of switches, and the interface configured to provide tactile feedback to the user by flexibly deforming toward the plurality of switches when pressed; and the interface is flexed away from the plurality of switches over each switch to simulate a plurality of buttons disposed over the plurality of switches.* Further more Strasser also failed to disclose the switch being formed from flexible sheet.
- However Wells discloses an interface formed from a continuous flexible sheet of at least partially transparent material and disposed over and spaced away from the plurality of switches, (Fig 2B-2E and page 11 line 19- page 12 line 6) discloses that the tactile feedback (i.e. interface) is pliable (i.e. flexible) and made out of silicon membrane as well as it is transparent. The interface also is spaced away from the plurality of switches as it is shown in fig 2C and 2D wherein the interface is disposed on top of input detection and display where the buttons are displayed.
- the interface configured to provide tactile feedback to the user by flexibly deforming toward the plurality of switches when pressed by the user; (Fig 2B-2E and page 11 line 3- 19) discloses that the interface is made out of flexibly material and deforms when it is used (pressed) by the user. Therefore one can see that the input (i.e. switch) is made out of flexible material.

- *the interface is flexed away from the plurality of switches over each switch to simulate a plurality of buttons disposed over the plurality of switches*  
(Fig 2B-2E and page 11 line 3- 19) discloses that the buttons flex upward away from touch sensitive (input detection) surface so that it can mimic mechanical button.

Strasser et al and Walls are analogues art because they are from the common area of user operable input devices. Strasser discloses user interface disposed on top of touch sensitive surface having plurality of regions. Further more each said regions corresponding to a different (selectable) functions. But fails to disclose said interface being formed out of continuous flexible transparent material and having the ability to deform when depressed by the user, however Wells discloses that the interface is made out of flexible and transparent material (silicon membrane). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Strasser's user interface to include (or be made out of) flexible transparent material (i.e. silicon) as an alternate design choose and further more to increases the comfort of users fingers by having a flexible buttons than a ridged one.

**As in Claim 12**, Strasser et al. discloses a *user interface according to claim 10, wherein the display signals include light that is visible through the interface* (Paragraph 32).

**As in Claim 14**, Strasser et al. discloses a *user interface according to claim 10, wherein the display signals include text that is visible through the interface.*

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(Paragraph 21 line 4-8)

**As in Claim 15**, Strasser et al. discloses *a user interface according to claim 10, wherein the display signals include graphics that are visible through the interface.* (Fig 1 item 24)

**As in Claim 21**, Strasser et al. discloses *a user interface according to claim 1, wherein a portion of the interface is formed as a rotary control configured to twist with respect to the touch sensitive surface.* (Paragraph 17) discloses rotary switches can be used same as rocker switch is used in Paragraph 32, 33 and 34.

**As in Claim 22**, Strasser et al. discloses *a user interface according to claim 1, wherein the a portion of the interface switch is configured to move in a direction not perpendicular to the touch sensitive surface; and wherein moving of the a portion of the interface switch in a direction not perpendicular to the touch sensitive surface is sensed by a control circuit which causes light to be selectively provided to one or more of the plurality of regions on the touch sensitive surface, each region corresponding to a different function.* (Paragraph 32, 33 and 34) discloses a rocker switch that moves in a direction not perpendicular to the face of the display and has a light that is related to the function of the display.

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**As in Claim 23**, Strasser et al. discloses *a user interface according to claim 1, wherein at least one of the interface and the touch sensitive is coupled to a control circuit configured to provide feedback to user actuation of the interface via of audible feedback.* (Paragraph 18 line 1-5 and Fig 8)

**As in Claim 24**, Strasser et al. discloses *a used interface system* (Paragraph 1) *according to claim 1, wherein at least one of the interface and the touch sensitive surface is coupled to a control circuit configured to provide feedback to user actuation of the interface via of vibratory feedback.* (Paragraph 18)

discloses tactile feedback is incorporated into user interface device. It also discloses type of feedback such as "click" sound. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate another form of tactile feedback (i.e. vibratory) in order to give the some kind of feedback to the user. Therefore the uses of vibratory feedback in a design choose. Further more (Fig 8) discloses the interface and touch sensitive surface are connected to the controller (i.e. processor) via bus.

**As in Claim 26**, Strasser et al. discloses *a user interface according to claim 10, wherein the rotary switch is configured to be twisted in a direction not perpendicular to the face of the display.* (Paragraph 17, 32, 33 and 34) discloses a rotary switches can be used same as rocker switch that moves in a direction not perpendicular to the face of the display and further more it is inherent to a rotary switch to twist.

**As in Claim 27**, Strasser et al. discloses *a used interface according to claim 10, wherein at least one of the interface and the plurality of switches is coupled to a control circuit configured to provide feedback to user actuation of the interface via audible feedback.* (Paragraph 18 line 1-5 and Fig 8)

**As in Claim 28**, Strasser et al. discloses *a user interface system* (Paragraph 1) *according to claim 10, wherein at least one of the interface and the plurality of switches is coupled to a control circuit configured to provide feedback to user actuation of the interface via vibratory feedback.* (Paragraph 18) discloses tactile feedback is incorporated into user interface device. It also discloses type of feedback such as "click" sound. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate another form of tactile feedback (i.e. vibratory) in order to give the some kind of feedback to the user. Therefore the uses of vibratory feedback in a design choose. Further more (Fig 8 and Paragraph 38) discloses the interface and operable element 26 are connected to the controller (i.e. processor) via bus.

7. Claims 6, 8, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strasser et al. (US PGPub No 2003/0128191) in view of Walls (WO 03/088164) and further view of Obradovich (US Pat No 6282464).

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**As in Claim 6**, Strasser et al. discloses *a user interface* (Paragraph 1), as discussed above, but fails to disclose *the user interface is mounted in a vehicle*. However, Obradovich (Column 6 line 7- 10 and line 15- 19) discloses an interface 102a and b are installed on the dashboard of a vehicle. Strasser et al. and Obradovich are analogous art because they are from the common area of user interface device that has the versatility of a touch screen while still being as easy to operate as a conventional, mechanical switch. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references (Strasser et al. and Obradovich), because Obradovich suggests multimedia information and control interface system for use in an automobile and mounted close to the center of the dashboard of the automobile next to the steering wheel. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the interface device of Strasser et al. to be mounted in the interior of a vehicle as disclosed by Obradovich because Obradovich discloses an interface device that has touch screen is mounted on the dashboard of a vehicle as found in claim 6.

**As in Claim 8**, Strasser et al. discloses *a user interface* (Paragraph 1), as discussed above, but fails to disclose *the touch sensitive surface and interface are mounted in an automobile interior element*. However, Obradovich (Column 6 line 7- 10 and line 15- 19) discloses an interface 102a and b are installed on the dashboard of a vehicle. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the interface device of



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Strasser et al. to be mounted in the interior of a vehicle as disclosed by Obradovich because Obradovich discloses an interface device that has touch screen is mounted on the dashboard of a vehicle as found in claim 8.

**As in Claim 9**, Strasser et al. discloses *a user interface* (Paragraph 1), as discussed above, but fails to disclose *the touch sensitive surface and interface are mounted in an automobile interior element*. However, Obradovich (Column 6 line 7- 10 and line 15- 19) discloses an interface 102a and b are installed on the dashboard of a vehicle. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the interface device of Strasser et al. to be mounted in the interior of a vehicle as disclosed by Obradovich because Obradovich discloses an interface device that has touch screen is mounted on the dashboard of a vehicle as found in claim 9.

**As in Claim 16**, Strasser et al. discloses *a user interface* (Paragraph 1), *the plurality of switches* (Fig 1 item 26), as discussed above, but fails to disclose *interface and display are mounted in a automobile interior element*. However, Obradovich (Column 6 line 7- 10 and line 15- 19) discloses an interface 102a and b are installed on the dashboard of a vehicle. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the interface device of Strasser et al. to be mounted in the interior of a vehicle as disclosed by Obradovich because Obradovich discloses an interface device that has touch screen is mounted on the dashboard of a vehicle as found in claim 16.

8. Claims 17, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strasser et al. (US PG Pub No 2003/0128191) in view of Obradovich (US Pat No 6282464).

**As in Claim 17**, Strasser et al. discloses *a user interface system* (Paragraph 1), *comprising:*

- *a display* (Fig 1 item 12); *an interface disposed over the display* (Paragraph 22 and Fig 5 item 12 and 40) *and comprising:*
- *a material that is at least partially transparent* (Paragraph 15 line 1-4 Fig 1 item 18) discloses operable element 26 may comprise at least one transparent region 18.
- *configured to provide tactile feedback to a user*, (Paragraph 16 line 1-4 and Fig 2 item 36, 38) discloses transparent region 18 is connected to switch 36 and tactile feedback mechanism 38 so that the operator of the device can get tactile feedback.
- *the interface including a plurality of contact regions* (FIG 1 item 26) discloses a plurality of input areas (*contact regions*), *each contact region corresponding to a switch having a function* (Paragraph 26 Fig 1 item 24) discloses operable element 26 may be automatically changed to match a change in the function of the operable element 26.;
- *a control circuit coupled to the display and the interface* (Fig 8 item 60) ,

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- *the control circuit configured to receive control data from the interface in response to actuation of a contact region, (Fig 8 item 60, 62 and 26) discloses operable element 26 can be activated (depressed) by the user and the control data is sent thru SIO via bus and interface to the processor.*
- *to provide display signals to the display based on the corresponding switch function; (Paragraph 26 Fig 1 item 24) discloses operable element 26 may be automatically changed to match a change in the function of the operable element 26.*
- *a memory coupled to the control circuit and configured to store display data. (Fig 8 item 60 and 64)*
- *a rotary switch [(Paragraph 17) discloses rotary switches can be used], and configured for twisting relative to the at least one of a system of light and the electronic display, wherein the rotary switch (Paragraph 17) is configured to be twisted and to create one or more buckle points in the flexible sheet of the interface when twisted, the buckle point detectable by the touch sensitive surface. (Paragraph 17, 32- 34) discloses rotary switches can be used and further more it is inherent to a rotary switch to twist. Strasser et al. and Walls are silent regarding buckle points. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify teachings of Strasser et al. so to have the rotary switch twist to a maximum point such that a buckle point is formed, which causes resistance/restriction from any further*

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movement of the rotary switch, in order to indicate to the user that the maximum rotation point has been reached.

- But Strasser et al. fails to disclose *the control data to a vehicle system based on the corresponding switch function*. Further more Strasser also failed to disclose the switch being formed from flexible sheet.
- However Obradovich (Column 5 line 1- 53) discloses an interface with touch-screen and displayed option selection capabilities, so that the user is able to obtain information on and control selectable functions of the automobile such as the instrument panel, navigation function and more.
- But, Strasser et al. and Obradovich failed to disclose the switch being formed from flexible sheet.
- However Wells (Fig 2B-2E and page 11 line 19- page 12 line 6) discloses that the tactile feedback (i.e. interface, switch) is pliable (i.e. flexible) and made out of silicon membrane as well as it is transparent. Therefore one can see that the input (i.e. switch) is made out of flexible material.

Strasser et al. and Obradovich and Wells are analogous art because they are from the common area of user interface device that has the versatility of a touch screen while still being as easy to operate as a conventional, mechanical switch. Strasser discloses user interface disposed on top of touch sensitive surface having plurality of regions. Further more each said regions corresponding to different (selectable) functions, but fails to disclose the switch being formed from the flexible sheet as well as the control data to a vehicle system based on the corresponding switch function. However Wells discloses

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that the interface is made out of flexible and transparent material (silicon membrane) and Obradovich (Column 5 line 1- 53) discloses an interface with touch-screen and displayed option selection capabilities, so that the user is able to obtain information on and control selectable functions of the automobile such as the instrument panel, navigation function and more. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the interface device of Strasser et al. to be mounted in the interior of a vehicle with a flexible switch so that the use can identify individual switches and get feed-back with out taking his/her eye from the road, this will make the device more user friendly as well as safe to use in the an automobile since the driver do not have to look at the input to confirm that he/she had make an input.

**As in Claim 18**, Strasser et al. discloses *a user interface system* (Paragraph 1) *according to claim 17, wherein the display is a touch sensitive surface having a plurality of regions, each region corresponding to a switch having a function.* (Paragraph 14 and Fig 1 item 12 and 26) discloses a plurality of regions (four user operable element 26) labeled L and (display 12) labeled U. (Paragraph 26 Fig 1 item 24) discloses operable element 26 may be automatically changed to match a change in the function of the operable element 26, hence operable element 26 has different function.

**As in Claim 19**, Strasser et al. discloses *a user interface system* (Paragraph 1) *according to claim 17, wherein the display* (Paragraph 13 line 4 and fig 1 item

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12), *the interface* (Paragraph 1), *the control circuit* (Paragraph 136 line 2 and fig 8 item 60) *and the memory* (Paragraph 36 line 4 and fig 8 item 64) as discussed above, but fails to disclose *are mounted in an automobile interior element*.

However, Obradovich (Column 6 line 7- 10 and line 15- 19) discloses an interface 102a and b are installed on the dashboard of a vehicle. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the interface device of Strasser et al. to be mounted in the interior of a vehicle as disclosed by Obradovich because Obradovich discloses an interface device that has touch screen is mounted on the dashboard of a vehicle as found in claim 19.

**As in Claim 20**, *a user interface system according to claim 17, wherein a function corresponding to a contact region may be reconfigured by at least changing the display signals provided to an area of the display disposed beneath the contact region.* (Paragraph 26 Fig 1 item 24) discloses operable element 26 may be automatically changed to match a change in the function of the operable element 26.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENYAM KETEMA whose telephone number is (571)270-7224. The examiner can normally be reached on Monday-Friday 8:00AM - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SHALWALA BIPIN H can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ B K /

Examiner, Art Unit 2629

/David L Lewis/

Primary Examiner, Art Unit 2629